Request for City Council Committee Action from the Department of Public Works

Date: December 10, 2013

To: Honorable Sandra Colvin Roy, Chair Transportation & Public Works Committee
Referral to: Honorable Betsy Hodges, Chair Ways and Means/Budget Committee

Subject: **Engineering Services Agreement with CDM Smith for Fridley Filtration Plant Rehabilitation**

Recommendation:

Authorize of the proper City officials to enter into an engineering services agreement with CDM Smith for $965,000 for preliminary design phase services for the rehabilitation of Fridley Filtration Plant. Funds are available in the Capital Budget. No additional appropriation is required.

Previous Directives:

- July 19, 2013 – Council authorized a Request for Proposal (RFP) for design and construction administration services for the Fridley Filtration Plant Rehabilitation project.
- December 12, 2012 – Council adoption of 2013 Capital Budget, including $2,700,000 for WTR24 Fridley Filter Plant Rehabilitation.
- December 14, 2012 – Council adoption of 2012 Capital Budget, including $100,000 for WTR24 Fridley Filter Plant Rehabilitation.

Department Information:

Prepared by: Dale Folen, Senior Professional Engineer, 661-4908

Approved by: _____

Steven A. Kotke, P.E., Director of Public Works

Presenters in Committee: Dale Folen, and Glen Gerads, Director

Reviews

- Permanent Review Committee (PRC): Approval _X_ Date ___6/11/2013____
- Civil Rights Approval Approval ___ Date _____
- Policy Review Group (PRG): Approval ___ Date _____

Financial Impact
- No financial impact

Community Impact
- City Goals - Livable Communities, Healthy Lives

Supporting Information

Project Background

The City constructed the Fridley Filtration Plant (FFP) in two phases during the 1920s to increase the filtration capacity of its potable water system. The plant was operated until the early 1970's when the 10 north filters were rebuilt to convert them to dual media (sand and anthracite) with clay tile under drains. Several years later, the 10 south filters were rebuilt with precast concrete underdrains. During those reconstruction projects, the equipment necessary for filter operation was replaced, including under-drain systems, filter media, and some of the control valves. The original water piping, backwash supply system, and gate valves remain in service today. Minneapolis is now facing multiple issues that are driving the need to rehabilitate the filters again.

The City conducted (or commissioned) multiple investigations between 2010 and 2012 to evaluate the existing filter media and underdrain conditions, assess long-term water quality goals (in particular with respect to taste and odor control), evaluate technologies to meet those goals, and evaluate operational redundancies needed to meet the desired level of service.

The results of the evaluations and studies identified the major elements for rehabilitation of the plant. The City has included funding of this project in the 5 year capital program to ensure reliability and functionality of FFP for the foreseeable future. The overall project is estimated at $40,000,000. The program will extend the life of the existing structure, improve filtered water quality and improve system reliability.

Engineering Services Contract

Public Works issued a Request for Proposals to select a consultant partner for the rehabilitation of the FFP. Staff received proposals from four engineering firms and selected the firm of CDM Smith Inc. based on their qualifications to perform the work and their knowledge of the project.

The engineering services agreement will be divided into two parts. The first part will include Initial Investigations and Preliminary Design. The second part, to be submitted to the City Council in mid-2014, will include Final Design and Construction Phase services.

The Request for Proposals included a query for each engineering firm to identify potential ideas for cost savings in the overall project, after they had evaluated the reports developed in recent years about the filtration plant.

Initial Investigations in the first part of the engineering agreement will evaluate several ideas for 1) reducing costs, 2) improving the project, 3) compare viable alternatives that need a more detailed investigation than previous studies allowed, or 4) incorporate findings of on-going pilot-scale studies. The Preliminary Design will develop a roughly 30 percent complete set of project drawings after the investigations identify the project Basis of Design. The engineering fee for the first part of the agreement will be $965,000, using an hourly-not-to-exceed format. The second part of the engineering agreement will be developed after the Basis of Design is finalized.

Staff recommends authorization to enter into an agreement with CDM Smith Inc. for the Initial Investigations and Preliminary Design phase.